International Civil Aviation Organization

Eleventh Meeting of the Aeronautical Communication Services Implementation Coordination Group (ACSICG/11)

Bangkok, Thailand, 19 - 22 March 2024

Agenda Item 6:   Review and update the AMHS/ATN/AIDC Implementation Status
                             6.1 AMHS implementation Status

AMHS IMPLEMENTATION STATUS FROM THAILAND

(Presented by Thailand)

SUMMARY

This paper presents information about AMHS implementation status from Thailand as well as the summary of link configuration after successful implementation of CRV network.
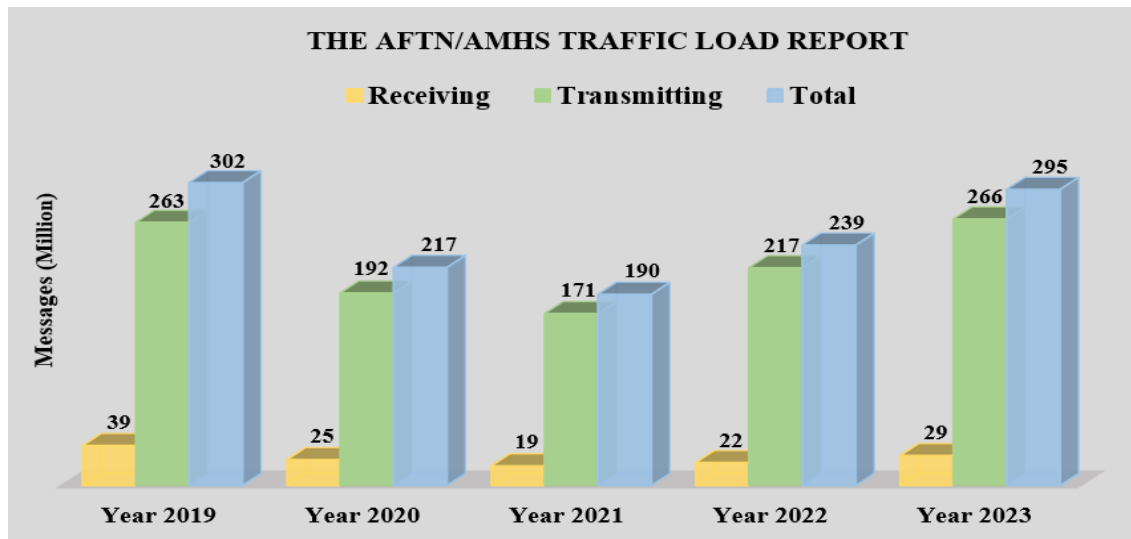
1.   **INTRODUCTION**

1.1   Thailand completed the AMHS system implementation in July 2011. Currently Thailand is transitioning from AFTN to AMHS and has completed several commissions of AMHS connection.

1.2   Furthermore, AEROTHAI has also completed implementation of CRV network in May 2022. The current CRV bandwidth is 1 Mbps with Package A configuration. Following the CRV implementation, AEROTHAI has started migrating AMHS links from conventional IPLC (private leased line). At the present, most IPLC AMHS link has migrated onto CRV and AEROTHAI has also started investigating other services to be used on CRV such as voice, SWIM-enabled applications, etc.

2.   **DISCUSSION**

2.1   Following the AMHS implementation, Thailand AMHS system has connected to other BBIS states as follow:
- Hong Kong China on 22nd September 2014
- India on 29th September 2014
- Singapore on 23rd December 2014
- Beijing on 26th April 2018
- Rome on 27th January 2022

With regards to other BIS states as follow:
- Cambodia on 10th December 2013
- Laos PDR on 21st August 2018
- Malaysia on 1st December 2019

- Bangladesh on 23rd March 2015
- Myanmar on 30th July 2018
- Bhutan on 1st July 2019

2.2   Thailand has performed IOT and POT with Vietnam, the commissioning is planned to be completed during Q4 2024.

2.3   In addition, Thailand has completed commission of SITA AMHS gateway inter connections on 14th September 2017.

2.4   Bangkok COM Centre has the AFTN/AMHS traffic load report as followed:

Year 2019	Receiving	Transmitting	Total
January	3,095,344	22,975,371	26,070,715
February	2,873,404	20,626,427	23,499,831
March	3,774,141	22,710,565	26,484,706
April	3,122,069	21,537,192	24,659,261
May	2,843,793	21,366,035	24,209,828
June	3,824,297	20,874,685	24,698,982
July	3,487,911	22,523,440	26,011,351
August	3,354,460	22,270,756	25,625,216
September	3,298,526	21,409,025	24,707,551
October	3,310,813	21,957,978	25,268,791
November	3,388,022	22,623,928	26,011,950
December	3,361,058	22,481,111	25,842,169

Year 2020	Receiving	Transmitting	Total
January	3,482,978	23,522,853	27,005,831
February	2,839,547	20,534,422	23,373,969
March	2,399,370	18,157,643	20,557,013
April	1,473,782	10,201,740	11,675,522
May	1,626,568	11,492,737	13,119,305
June	1,748,436	13,250,165	14,998,601
July	1,946,943	14,361,850	16,308,793

August	1,965,126	15,201,144	17,166,270
September	1,938,784	15,439,956	17,378,740
October	2,420,174	16,772,523	19,192,697
November	1,850,307	16,372,565	18,222,872
December	1,941,742	17,300,684	19,242,426
Year 2021	**Receiving**	**Transmitting**	**Total**
January	1,628,510	13,617,556	15,246,066
February	1,462,901	13,024,919	14,487,820
March	1,790,649	16,192,696	17,983,345
April	1,678,872	15,256,185	16,935,057
May	1,425,042	12,724,607	14,149,649
June	1,447,799	13,709,903	15,157,702
July	1,453,510	13,534,445	14,987,955
August	1,381,585	12,946,764	14,328,349
September	1,460,295	13,713,835	15,174,130
October	2,153,820	14,773,866	16,927,686
November	1,678,499	15,561,651	17,240,150
December	1,798,389	16,902,233	18,700,622

Year 2022	**Receiving**	**Transmitting**	**Total**
January	1,667,832	15,676,082	17,343,914
February	1,592,432	15,107,345	16,699,777
March	1,808,896	17,063,600	18,872,496
April	1,736,845	16,376,213	18,113,058
May	1,799,408	17,365,727	19,165,135
June	1,859,818	17,464,307	19,324,125
July	1,987,451	18,221,514	20,208,965
August	1,953,693	18,859,564	20,813,257
September	1,948,598	18,331,562	20,280,160
October	2,027,947	19,963,480	21,991,427
November	2,115,937	21,217,993	23,333,930
December	2,176,335	22,247,362	24,423,697

Year 2023	**Receiving**	**Transmitting**	**Total**
January	2,350,878	22,084,656	24,435,534
February	2,099,987	20,251,833	22,351,820
March	2,525,429	23,849,402	26,374,831
April	2,437,335	22,623,378	25,060,713
May	2,378,981	22,543,288	24,922,269
June	2,360,329	21,851,719	24,212,048
July	2,528,587	22,240,305	24,768,892
August	2,493,946	22,690,819	25,184,765
September	2,359,187	21,446,529	23,805,716
October	2,615,308	23,145,896	25,761,204
November	2,617,772	22,149,917	24,767,689
December	2,907,624	21,885,393	24,793,017

2.5   Thailand AMHS system is able to support IWXXM.

2.6   Thailand implemented AIDC services over AMHS and the implementation status is as follow:
- Malaysia on 14th March 2020
- Laos PDR on 14th July 2020
- Cambodia on 22nd February 2021
- Myanmar planned to implement

2.8   To Implement CRV, AEROTHAI decided to initially replace conventional IPLC links with CRV. At the present, we implemented MPLS link between AEROTHAI and Rome with bandwidth of 2 Mbps. As for CRV, AEROTHAI requested CRV connection with Package A configuration and bandwidth of 512 Kbps in 2021 and upgrade to 1 Mbps in 2024. AEROTHAI has completed implementation of CRV network in May 2022.

2.9   In the year 2021, AEROTHAI was contacted by Bhutan to migrate AMHS connection over CRV. Therefore, we requested PCCWG to set up 6 data connections over CRV, namely connections from AEROTHAI to Singapore, Hong Kong China, India, Malaysia, Beijing China and Bhutan. From May 2021 onwards, AEROTHAI migrated AMHS connections over CRV and the current status is as follow:

Configuration	Destination	AMHS Status	Previous Link Status
CRV link (Bandwidth 64 Kbps)	Singapore	Operational	Decommissioned
CRV link (Bandwidth 64 Kbps)	Mumbai, India	Operational	Decommissioned
CRV link (Bandwidth 64 Kbps)	Hong Kong, China	Operational	Decommissioned
CRV link (Bandwidth 64 Kbps)	Beijing, China	Pending Signing of Technical Memorandum of Corporation (TMC)	-
CRV link (Bandwidth 64 Kbps)	Kuala Lumpur, Malaysia	Operational	Decommissioned
CRV link (Bandwidth 64 Kbps)	Paro, Bhutan	Operational	Used as spared link (Internet)

3.   ACTION BY THE MEETING

3.1   The meeting is invited to:

a)   note the information contained in this paper; and

b)   discuss any relevant matter as appropriate

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